

MesoDynamic Architectures Q&A

Q1. I would like to involve a team from a university in Germany. Are there any problems using a foreign team as sub-contractors?

A1. There are no restrictions in the BAA that would prevent this.

Q2. Is this BAA geared only toward enhancing performance of electronic devices?

A2. As stated on page 6 of the BAA, "the goal of the BAA is to overcome traditional performance limitations—including bandwidth, sensitivity, power, and speed—by exploiting the dynamics of mesoscale systems. The objective is to deliver devices and architectures that will ultimately provide the Department of Defense with unrivaled communication, sensing, and computation, while simultaneously accelerate the transition to quantum engineering. ".

The emphasis of the Meso program is on new functionality and capabilities, as well as improved performance; of particular interest are approaches that emphasize dynamics, collective behavior, nonlinearity and noise that are not exploited in present day state of the art electronic and optical systems. There are relevant statements in the beginning of the Program Description section and in the Introduction.

Q3. Are you looking for developing communications equipment which cannot be intercepted? If not, please provide some type of example of what you are looking for.

A3. The BAA's first paragraph of Sec. I.B states "DARPA is soliciting innovative research proposals to overcome traditional performance limitations—including bandwidth, sensitivity, power, and speed—by exploiting the dynamics of mesoscale systems. The objective is to deliver devices and architectures that will ultimately provide the Department of Defense with unrivaled communication, sensing, and computation, while simultaneously establishing well-defined problems to accelerate the transition to quantum engineering."

Specific examples are broken down by technical thrust and can be found in Secs. I.B.1, I.B.2, and I.B.3. In deciding if you have some to propose please keep in mind the text from page 7 of the BAA "This BAA provides a number of examples for illustration purposes. None of these should be interpreted as preferred devices or architectures. To the contrary, the relative immaturity of many of the topics involved this BAA provide an opportunity for members of the proposer community to define which devices and architectures are most likely to benefit from tapping the inherent nature of mesoscale systems."

Q4. In developing the costs / risks / benefit analysis of putting together this collaborative team and submitting our abstract, may we inquire about motivations behind this BAA and if there is a specific solution space already in mind?

A4. The answer to this is spelled out Sec. I of the BAA. In particular, the Introduction (Sec. I.A) on pages 4-6 and the beginning of the Program Description (Sec. I.B) on pages 5-6 highlight the motivations.

The entire technical section, Sec. I, defines the solution space. There are numerous illustrative examples of specific solutions given throughout the text, none of them are preferred. This statement is emphasized on page 7 through the text "This BAA provides a number of examples for illustration purposes. None of these should be interpreted as preferred devices or architectures. To the contrary, the relative immaturity of many of the topics involved this BAA provide an opportunity for members of the proposer community to define which devices and architectures are most likely to benefit from tapping the inherent nature of mesoscale systems."

Also see the slides from the Proposer's Day on the Meso website at:
safe.sysplan.com/meso/

Q5. Please advise as to the recommended start date for this RFP for purposes of constructing the required budget for the abstract.

A5. Your cost proposal should be the best estimation of what it would cost for you to do the work you are proposing. For example, if you propose the duration of your effort to be three, 18 month phases, you will need to provide a cost break down for each of the three phases and by the fiscal years the phases cover for the total duration.

Q6. Are single devices or architectures preferred? What are some examples?

A6. Both are acceptable; neither is preferred. Examples can be (but are not limited to) a single device, such as a nano laser, or a group of devices that together make an architecture (such as a laser array).

Q7. Does the proposed device need to be fully packaged?

A7. The device does not need to be fully packaged. However, demo devices are desirable but not required.

Q8. Are proposals evaluated as they are received?

A8. Proposals will not be evaluated before the proposal due date.

Q9. The BAA indicates that proposals for the DEFYS thrust will not be accepted. Are oscillators excluded as an application if they fit into one of the other 3 thrusts of the BAA?

A9. While proposals specifically responding to the objectives and metrics (listed on pages 5 and 6 of the DEFYS BAA;

https://safe.sysplan.com/meso/docs/BAA_DEFYS_Aug2009.pdf
<https://safe.sysplan.com/meso/docs/BAA_DEFYS_Aug2009.pdf>) of the DEFYS thrust will not be evaluated, oscillators in general are not excluded as applications.

Q10. Do metrics have to be included in the abstract?

A10. Metrics should be included in the abstract.

Q11. Will there be an extension of the abstract deadline?

A11. There will be no extension of the abstract deadline. Abstracts are due at 12pm EST; November 10, 2010 and will not be accepted after this time.

Q12. Can you please clarify if a team of proposers from multiple universities need to submit one proposal abstract by the lead institution or if each investigator from each institution needs to submit a proposal abstract?

A12. There can only be one lead institution per proposal. The other institutions would have to propose as subcontractor on the same proposal. As stated in the BAA in Volume II, Cost Proposal, page 25, the prime contractor is responsible for compiling and providing, as part of its proposal submission to the Government, subcontractor proposals prepared at the same level of detail as that required by the prime. Subcontractor proposals include Interdivisional Work Transfer agreements (ITWA) or similar arrangements. If seeking a procurement contract, the prime contractor shall provide a cost reasonableness analysis of proposed subcontractor prices. Such analysis shall indicate the extent to which the prime contractor has negotiated subcontract prices. Note: This language should be in your detailed proposal sections and would be necessary for any award. You can ask for clarifications for this if it is NOT included, just double check with CO before doing so.

Q13. Is TFIMS available for abstract submissions?

A13. TFIMS is available for abstract submission if proposer will be seeking a FAR based award/contract. If proposers are seeking a grant or cooperative agreement, abstracts can be submitted via grants.gov or hard-copy. See pages 17-18 for detailed instructions.

Either submit the abstract through Grants.gov through the full application package as an attachment (SF 424), or through T-FIMS, or by hard copy.

Q14. Is TFIMS the preferred method for submissions?

A14. TFIMS is the required method for submission of all proposals except those requesting an assistance instrument (grant or cooperative agreement). Submission of proposals requesting award of an assistance instrument must be submitted either electronically via grants.gov or in hardcopy.

Q15. Do I have to propose to every technical/thrust area?

A15. No. Only submit responses to the technical areas that strongly align with your strengths. It is perfectly acceptable to propose work that only addresses one of the technical areas.

However, if you feel your research interests are too narrow (but deep) to substantially contribute to the objectives of the BAA, you might consider teaming with other researchers at the DARPA-BAA-11-07 Teaming Website:
<http://teaming.sysplan.com/BAA-11-07/> .

Q16. How important is the Cost Proposal?

A16. Very. Please do not submit a poorly constructed cost proposal. A well prepared cost proposal (as described in Section III-B6, “Volume II, Cost Proposal”) will: (a) follow the checklist provided in Attachment 1 Cost-Proposal Checklist, (b) clearly break down costs by Technical Area, task (correlated with the Statement of Work), phase, fiscal year and (c) justify all expenses with price quotes for individual items associated with tasks, travel, staffing, etc. Please note, new equipment purchases will not be approved if the laboratory already owns equipment (or can share with another laboratory) that can function to fulfill the task. Please take the time to check for math errors and inconsistencies, they will reflect very poorly upon your proposal. We suggest that you read through your cost volume as if you were a non-technical government contract specialist performing their due diligence on behalf of the taxpayer, to identify the specific costs of each and every individual task for each and every technical area.

Q17. What is entailed in a PI Meeting?

A17. Section VI-B1 of BAA 11-07, “Meeting and Travel Requirements” describes PI Meetings. Briefly, PIs are expected to meet with the Program Manager and the other PIs awarded under this program. This will occur roughly twice a year in a closed meeting. It is expected that PIs will freely share their research results with each other and the Program Manager. The Program Manager would like to instill a “team spirit” among all of the performers in this program, such that the overall goals will be achieved.

Q18. How much money should I ask for?

A18. As much as it takes to achieve the objectives you describe in your proposal. If DARPA were to list a cap of \$X, then most proposals would request \$X-1. Your cost should be based primarily upon how much money is required to perform the research you feel is necessary to meet the objectives in the Technical Areas described in Section 1 of BAA 11-07. Please bear in mind, however, that in this case DARPA prefers to fund multiple independent efforts instead of one single large effort. Proposals must be fiscally conservative and will be scrutinized for unnecessary or inflated expenses. Take great care to demonstrate that the funding you request is the minimum amount needed to achieve the innovations described in the proposal.

If your proposal is selected to be awarded, then a government contract office will negotiate the terms of the grant or contract. During this negotiation phase, every aspect of your statement of work and cost proposal (as described in Section III-B6 of BAA 11-07, “Volume II, Cost Proposal”) will be negotiated. Please ensure that you have followed all of the instructions in BAA 11-07, including the required checklist in Attachment 1. This will enable the government contract office to expedite negotiations.

Q19. Can I submit revisions to my abstract once it has been turned in?

A19. Resubmissions of abstracts will not be accepted.

Q20. Can I submit my full proposal early?

A20. Early proposals are permitted. However, full proposals will not be reviewed until after the full proposal due date when all full proposals have been submitted.